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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/511,821

05/11/2005

Olaf Gebauer

SC8373/LcA 36,032

8845

34469

7590

05/28/2008

BAYER CROPSCIENCE LP

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EXAMINER

MURRAY, JEFFREY H

ART UNIT

PAPER NUMBER

1624

MAIL DATE

DELIVERY MODE

05/28/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/511,821	Applicant(s) GEBAUER ET AL.	
	Examiner JEFFREY H. MURRAY	Art Unit 1624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 February 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 7 and 12-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 7 and 12-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Status of Claims

1. Claims 7 and 12-14 are pending in this application. Claims 1-6 and 8-11 have been cancelled. This action is in response to the applicants' amendment after a non-final action and reply filed on February 21, 2008.

Status of Objections

2. The title in the specification is objected to as not being descriptive. The objection of the title of the disclosure is hereby withdrawn in view of applicants' arguments to the title of the specification. "Triazolopyrimidines" is an acceptable title.

3. The specification is objected to as not containing proper arrangement. The objection to the specification is hereby withdrawn in view of applicants' arguments that this is merely a suggestion, rather than mandatory, to which examiner agrees.

4. The specification is objected to as not containing proper trademarks. The objection to the specification is hereby withdrawn in view of applicants' amendments to the specification.

Status of Rejections

5. Claims 7 and 9 are rejected under 35 U.S.C. 102(b) by WO98/046607, as failing to overcome the novelty requirement. The rejection of Claims 7 and 9 is hereby withdrawn in view of a lack of a species to overcome the broad genus claim.

6. Claims 7 and 9 are rejected under 35 U.S.C. 102(e) by U.S. No. 6,559,151, as failing to overcome the novelty requirement. The rejection of Claims 7 and 9 is hereby withdrawn in view of a lack of a species to overcome the broad genus claim.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior office action.

7. Claims 7 and 9 are rejected under 35 U.S.C. 103(a) as failing to overcome the nonobviousness requirement. The arguments of the applicants are noted, however not found persuasive, therefore the rejection of Claims 7 and 9 is hereby maintained.

8. Claims 7 and 9 are rejected under obviousness type double patenting. The rejection of Claims 7 and 9 is hereby withdrawn in view of no common inventor being cited in the prior art reference.

New/Maintained Rejections

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10. Claim 13 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 13 has two distinct definitions for the term G. The first is located in the third line of the claim whereas the second definition for G is located at the end of the claim. The definitions are contrary to each other. This makes the claim indefinite as the examiner cannot determine which is the proper definition to use for G. Appropriate correction is required. No new matter permitted.

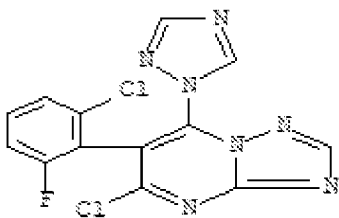
Claim Rejections - 35 USC § 102

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11. Claims 7, 12, and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Pees, et. al., U.S. No. 5,593,996. Pees, et. al., which was published on January 14, 1997. It teaches the following compound:

RN 187234-26-0 CAPLUS

CN [1,2,4]Triazolo[1,5-a]pyrimidine, 5-chloro-6-(2-chloro-6-fluorophenyl)-7-(1H-1,2,4-triazol-1-yl)- (9CI) (CA INDEX NAME)



which is a triazolopyrimidine that contains a Cl for G; a 2-chloro-6-fluorophenyl for R; and a 1H-1,2,4-triazolyl group as G.

Claim Rejections - 35 USC § 103

For the purposes of the 103 rejection below, the examiner has interpreted the definition "G" in claim 13 as the first of the two definitions provided.

12. Claims 7 and 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pees et. al., U.S. Patent No. 5,593,996, (herein the '996 patent) in view of American Cyanamid et. al., WO98/046607 (herein the '607 document).

The current application recites a variety of specific triazolopyrimidine compounds for antimicrobial activity. In this application there is the presence of triazolopyrimidine core with a hydrogen in the 2-position, a halogen in the 5-position, a

substituted phenyl in the 6-position and a nitrogen-bound heterocycle with an adjacent nitrogen or oxygen directly bonded to it within the heterocycle in the 7-position.

The '996 patent has an identical core structure to the current patent application with one point of diversity. Both the current application and '996 have a triazolopyrimidine core with a hydrogen in the 2-position, a halogen in the 5-position and a substituted phenyl in the 6-position. Where the application and the patent differ is in the 7-position. In '996, the 7-position can be a heterocyclic ring, but the only species demonstrated is a triazolyl heterocyclic ring, whereas claim 13 describes the heterocyclic ring as a 5- or 6-membered ring with only two heteroatoms, either two adjacent nitrogens or an adjacent nitrogen and oxygen.

The published reference '607 has an identical core structure to the current patent application as well. Both the current application and '607 contain a triazolopyrimidine core with a hydrogen at the 2-position, a halogen in the 5-position, a substituted phenyl in the 6-position and generally a heterocycle in the 7-position. Where the application and the reference differ is the distinct teachings of the 7-position. '607 teaches a compound in which the 7-position is a heterocycle attached by the nitrogen, whereas the current application teaches the 7-position heterocycle attached by the nitrogen with an additional nitrogen or oxygen directly bonded to it within the heterocycle in the 7-position.

The applicants have argued that the term "heterocycle" describes a very wide range of possible compounds with a very different chemical scope. (page 9, para.5). In addition they have argued that there is no teaching, suggestion or motivation in the prior

art. Examiner disagrees. The scope of the prior art is not “different”, it is “broader.” All the heterocycles which are claimed in the current application are encompassed by the broader prior art claims. Applicant themselves have pointed out heterocycles that would fall under their own claims. Applicants cited in their response that in the ‘607 document, “...the 607 reference defines on page 5, lines 14-21 heterocyclyl group as a saturated heterocyclyl group having 5 or 6 ring atoms selected from carbon, nitrogen, oxygen. Further selected are pyrrolidine, *pyrazolidine*, piperidine, piperazine or morpholine.” (emphasis added). Pyrazolidine is a 5-membered heterocyclic ring with 2 adjacent nitrogens, which would fall under claims 7 and 12-14 of the current application.

The motivation to combine these references comes from their specification of ‘607. Applicant themselves have pointed out that in the ‘607 document that, “the 607 reference defines on page 5, lines 14-21 heterocyclyl group as a saturated heterocyclyl group having 5 or 6 ring atoms selected from carbon, nitrogen, oxygen. Further selected are pyrrolidine, *pyrazolidine*, piperidine, piperazine or morpholine.” (emphasis added). By applicants own admission, the definition of the specification suggests using a pyrazolidine ring for use as a heterocyclyl group. Both of these references deal with triazolopyrimidine cores that may contain a heterocyclyl ring in the 7-position attached by a nitrogen, therefore the pyrazolidine ring would be an obvious ring to use in the 7-position.

It would have been obvious to one skilled in the arts at the time of the invention to be motivated to alter the heterocycle at the 7-position to be a pyrazolidine ring. Pees et. al. combined with American Cyanamid et. al. shows the necessary teachings that

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suggest altering the heterocycle at the 7-position to that of a pyrazolidine ring, and one would have been motivated to perform this substitution to attempt to enhance activity and afford a positive benefit from the replacement.

Conclusion

13. Claims 7 and 12-14 are rejected.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey H. Murray whose telephone number is 571-272-9023. The examiner can normally be reached on Mon.-Thurs. 7:30-6pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. James O. Wilson can be reached at 571-272-0661. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jeffrey H Murray/
Patent Examiner
Art Unit 1624

**/James O. Wilson/
Supervisory Patent Examiner
Art Unit 1624**